Remarks

Following the above amendments, claims 1, 2, 5-7, 10-13, 15, and 17 are pending Claims 3, 4, 8, 9, 14, 16, and 18-21 have been cancelled herein by in this application. amendment. The examiner has rejected claims 6, 7, 10-13, 15 and 17 under 35 U.S.C. § 112, second paragraph. The examiner has rejected claims 1, 2, 5-7, 10-13, 15, and 17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,638,895 to Dodson. The examiner has rejected claims 1, 2, 5-7, 10-13, 15 and 17 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,625,021 to Lofland et al.

Section 112 Rejections A.

The examiner has rejected claims 6, 7, 10-13, 15 and 17 of the application because of the lack of a structural relationship between some elements of the claims. The claims have been amended herein to clarify the structural relationship between elements of these claims. Applicants submit that the Section 112 rejections have been resolved by the foregoing amendments, and that the Section 112 rejections should be withdrawn.

Dodson Does Not Anticipate the Amended Claims В.

The Office Action does not identify the patent number for the Dodson reference. Applicants have assumed that the Dodson reference that formed the basis of the rejection is U.S. Patent No. 5,638,895. Applicants request that the examiner confirm that the applicants have correctly identified the Dodson reference of the examiner's rejections.

The Dodson reference does not anticipate the amended claims. Each of the amended claims includes a limitation that the fan of the heat sink be placed between first and second sets of fins. Further, each of the amended claims includes a limitation that the placement of the fan between the first and second sets of fins prevents access to the fan. In contrast with the invention of the amended claims, the heat sink of Dodson does not include a fan that is placed between the first and second sets of fins in a manner that prevents access to the fan. With reference to Figure 1 of Dodson, the fans 110L and 110R of Dodson are fully accessible.

The present invention is unlike the open fan arrangement of Dodson. The arrangement of the sets of fins of the present invention prevents access to the fan, including the blades of the fan. Because access to the fan is prevented, the fan of the heat sink need not include a separate shield to prevent injuries or damages that may result from contact with the fan. In contrast, the design of Dodson does not prevent access to the fans of Dodson.

Because Dodson does not disclose each element of the claims, a rejection of the claims of the present application on anticipation grounds is improper. "A claim is not anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir 1987). "The identical invention must be shown in complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1336 (Fed. Cir 1989). With respect to the pending claims, each and every element of claims is not found in Dodson. Specifically, Dodson does not disclose or suggest a heat sink in which the first and second sets of fins of the heat sink act to shield access to the ian of the heat sink. Because the invention of the pending claims is not disclosed in Dodson, any rejection of the pending claims on the basis of Dodson should be withdrawn, and the pending claims should be passed to issuance.

Lofland Does Not Anticipate the Amended Claims C.

The Office Action does not identify the patent number for the Lofland reference. Applicants have assumed that the Lofland reference that formed the basis of the rejection is U.S. Patent No. 6,625,021. Applicants request that the examiner confirm that the applicants have correctly identified the Lofland reference of the examiner's rejections.

Lofland does not anticipate the amended claims. Each of the amended claims is directed to a heat sink with fins that extend or are arranged perpendicularly relative to the base of the heat sink. In this arrangement, heat can be irradiated along the lengths of the fins and away from the base of the heat sink. There is an opening between adjacent fins and this open extends in an upward direction that is opposite the base of the heat sink. In this manner, there is a path for heat dissipation that is away from and directly opposite the heat sink's base, which is most often directly adjacent to the heat source.

The heat sink of Lofland does not include fins that are perpendicular to the base of the heat sink. Instead, the fins of the heat sink of Lofland are parallel to the base of the heat sink of Lofland. The parallel arrangement of the fins of Lofland is plainly shown in figures 1, 2, 4, 5, and 7 of Lofland. There is no disclosure or suggestion in Lofland that the fins of the heat sink of Lofland may be arranged in a vertical arrangement in which the fins are perpendicular to the base of the heat sink. Like Dodson, an anticipation rejection of the amended claims on the basis of Lofland is improper, as Lofland does not disclose a heat sink that includes a set of fins arranged perpendicularly relative to the base of the heat sink. Because the invention of the pending claims is not disclosed in Lofland, any rejection of the pending claims on the basis of Lofland should be withdrawn, and the pending claims should be passed to issuance.

Conclusion

Applicant respectfully submits that pending claims 1, 2, 5-7, 10-13, 15, and 17 of the present invention are allowable. Applicant respectfully requests that these claims be passed to issuance.

Respectfully submitted,

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